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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/049,750	12/09/2002	Wilhelm Tischer	HURR-1205	6008
24972 7590 12/19/2006 FULBRIGHT & JAWORSKI, LLP 666 FIFTH AVE NEW YORK, NY 10103-3198			EXAMINER RAMIREZ, DELIA M	
			ART UNIT 1652	PAPER NUMBER
			MAIL DATE 12/19/2006	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Advisory Action</b> <b>Before the Filing of an Appeal Brief</b>	<b>Application No.</b> 10/049,750	<b>Applicant(s)</b> TISCHER ET AL.	
	<b>Examiner</b> Delia M. Ramirez	<b>Art Unit</b> 1652	

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 14 November 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

#### AMENDMENTS

3. ☒ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
 (a) ☒ They raise new issues that would require further consideration and/or search (see NOTE below);  
 (b) ☐ They raise the issue of new matter (see NOTE below);  
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attached. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
 5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
 6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☒ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
 The status of the claim(s) is (or will be) as follows:  
 Claim(s) allowed: \_\_\_\_\_.  
 Claim(s) objected to: \_\_\_\_\_.  
 Claim(s) rejected: 95-124.  
 Claim(s) withdrawn from consideration: \_\_\_\_\_.

#### AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

#### REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see attached.  
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
 13. ☐ Other: \_\_\_\_\_.

***ADVISORY ACTION***

1. Claims 95-124 are pending.
2. Applicant's after final amendment filed on 11/9/2006 is acknowledged. Applicant's supplemental after final amendment filed on 11/14/2006 is acknowledged. The proposed amendments to the claims will not be entered. While amendments to the claims seem to overcome previous objections, 35 USC 112, second paragraph rejections, some of the grounds of rejections previously applied in regard to 35 USC 112, first paragraph, and the 35 USC 103 rejection over the teachings of Barbas in view of Baranov, the proposed amendments to the claims do not overcome all the grounds of rejections previously applied and raise new issues which would require further consideration as discussed below.
3. Proposed amended claim 123 would be rejected under 35 USC 112, second paragraph, due to the recitation of "the method of claim 122, wherein said starting material is fructose 1,6-diphosphate and said excess by-product is deoxyxylulose 1-phosphate (dX1P)" for the followings reasons. The method of claim 122 requires no starting materials or by-products prior to step (ii). Therefore, if no starting materials or by-products are present in the method of claim 122, it is unclear as to how limitations regarding the identity of the starting materials or by-products further limit the method of claim 123.
4. Proposed amended claims 121 and 123 would be objected to due to the recitation of "deoxyxyulose". The correct spelling of this word is "deoxyxylulose".
5. Previous claims 111-114 would remain rejected under 35 USC 112, first paragraph, written description for the reasons of record. Specifically, the claims require a step wherein the deoxyribonucleosides obtained from the reaction catalyzed by a purine nucleoside phosphorylase are further reacted in the presence of a different nucleobase to obtain a different deoxyribonucleoside (1) by any method, or (2) in the presence of any nucleoside 2-deoxyribonucleosyl transferase. However, the specification is silent with regard to (1) chemical catalysts and conditions which would allow the chemical synthesis of these deoxyribonucleosides, (2) the structures of other enzymes which would

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catalyze the required reaction in addition to the *L. leichmannii* enzyme encoded by the polynucleotide of SEQ ID NO: 13, or (3) the structural elements within the *L. leichmannii* enzyme disclosed which are representative of any enzyme that catalyzes that reaction.

6. Previous claims 111-114 would remain rejected under 35 USC 112, first paragraph, scope of enablement, for the reasons of record. Specifically, the claims require a step wherein the deoxyribonucleosides obtained from the reaction catalyzed by a purine nucleoside phosphorylase are further reacted in the presence of a different nucleobase to obtain a different deoxyribonucleoside (1) by any method, or (2) in the presence of any nucleoside 2-deoxyribonucleosyl transferase. However, the specification is silent with regard to (1) chemical catalysts and conditions which would allow the chemical synthesis of these deoxyribonucleosides, (2) other enzymes which would catalyze the required reaction in addition to the *L. leichmannii* enzyme encoded by the polynucleotide of SEQ ID NO: 13, or (3) the structural elements within the *L. leichmannii* enzyme disclosed which are required in any enzyme that catalyzes that reaction. Enabling the full scope of the claimed invention would require undue experimentation. Thus, one cannot reasonably conclude that the teachings of the specification enable the full scope of the claimed invention.

7. The rejections previously applied are, therefore, maintained for the reasons of record in view of the non-entry of the proposed amendments.

8. For purposes of Appeal, the status of the claims is as follows:

Claim(s) allowed: NONE

Claims(s) objected to: NONE

Claim(s) rejected: 95-124

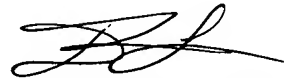
Claim(s) withdrawn from consideration: NONE

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PMR) system. Status information for published applications may be obtained from

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either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delia M. Ramirez whose telephone number is (571) 272-0938. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Ponnathapura Achutamurthy can be reached on (571) 272-0928. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.



Delia M. Ramirez, Ph.D.  
Patent Examiner  
Art Unit 1652

DR  
December 13, 2006